

IN THE CLAIMS:

Please amend claims 1, 11, 14, 24, 27, 37, and 42-46.

Please add new claim 47.

Please cancel claims 5, 10, 18, 23, 31, and 36, without prejudice or disclaimer.

1. (Currently Amended) A method for deciding on handover in a cellular communication system, ~~comprising: cells and a mobile station having a connection to at least a first cell providing a certain data transfer rate, comprising a bit rate, to the mobile station, the method comprising:~~

~~collecting bit rate information related to the~~ a mobile station, when the mobile station is moving from a first cell to a second cell wherein the mobile station initially has a connection to at least the first cell providing a certain bit rate to the mobile station, the collecting comprising measuring the bit rate provided to the mobile station by the first cell and/or a bit rate provided to the mobile station by the second cell; and

using the bit rate information for deciding on when handover of the mobile station from the first cell to a the second cell should be carried out by triggering the mobile station handover from the first cell to the second cell when the bit rate provided by the first cell and/or the bit rate provided by the second cell fulfils a predetermined condition(s), wherein the mobile station initially has a connection to at least the first cell providing a certain data transfer rate, including a bit rate, to the mobile station.

2. (Original) The method of claim 1, wherein the bit rate information comprises at least one of the following: the bit rate provided to the mobile station by the first cell, a bit rate provided to the mobile station by at least one other cell, a bit rate requested by the mobile station.

3. (Original) The method of claim 1, wherein the decision on handover of the mobile station from the first cell to the second cell comprises deciding on whether handover should be carried out.

4. (Original) The method of claim 1, wherein the decision on handover of the mobile station from the first cell to the second cell comprises deciding on to which cell handover of the mobile station should be made.

5. (Withdrawn) The method of claim 1, wherein the decision on handover of the mobile station from the first cell to the second cell comprises deciding on when handover should be carried out.

6. (Original) The method of claim 1, wherein information about traffic distribution in the system is utilized when deciding on handover of the mobile station.

7. (Original) The method of claim 1, wherein information about capacity provided by the system in different parts of the system is utilized when deciding on handover of the mobile station.

8. (Original) The method of claim 1, further comprising:
defining sub-areas within the coverage area of the system, and
defining preferable bit rates for each sub-area, whereby so defined sub-area information is used when deciding on handover of the mobile station.

9. (Previously Presented) The method of claim 3, further comprising:
defining a handover profile which defines preferable cell(s) for each bit rate, whereby the handover profile is used when deciding on handover of the mobile station.

10. (Withdrawn) The method of claim 5, wherein, when the mobile station is moving from the first cell to the second cell, the method comprises:

measuring the bit rate provided to the mobile station by the first cell and/or a bit rate provided to the mobile station by the second cell and

performing the mobile station handover from the first cell to the second cell when the bit rate provided by the first cell and/or the bit rate provided by the second cell fulfils a predetermined condition(s).

11. (Currently Amended) The method of claim ~~10~~1, wherein the predetermined condition requires that the bit rate is lower than a predetermined limit value, higher than a predetermined limit value or between two predetermined limit values.

12. (Original) The method of claim 11, wherein the limit value(s) is (are) based on the variation of the bit rate provided by the first cell and/or the bit rate provided by the second cell.

13. (Previously Presented) The method of claim 1, wherein the first cell and the second cell belong to different radio access systems or to the same radio access system.

14. (Currently Amended) A cellular communication system comprising:
cells; and
a mobile station having a connection to at least a first cell providing a certain ~~data transfer rate, comprising a bit rate,~~ to the mobile station; wherein the system is configured to when the mobile station is moving from the first cell to a second cell:

collect bit rate information related to the mobile station by measuring the bit rate provided to the mobile station by the first cell and/or a bit rate provided to the mobile station by the second cell; and

use the bit rate information ~~for~~ to decide ~~ing~~ on when mobile station handover from the first cell to a the second cell should be carried out by triggering the execution of

handover of the mobile station from the first cell to the second cell when the bit rate provided by the first cell and/or the bit rate provided by the second cell fulfils a predetermined condition(s).

15. (Original) The cellular communication system of claim 14, wherein the bit rate information comprises at least one of the following: the bit rate provided to the mobile station by the first cell, a bit rate provided to the mobile station by at least one second cell, a bit rate requested by the mobile station.

16. (Original) The cellular communication system of claim 14, wherein the system is further configured, when deciding on handover of the mobile station from the first cell to the second cell, to decide on whether handover should be carried out.

17. (Original) The cellular communication system of claim 14, wherein the system is further configured, when deciding on handover of the mobile station from the first cell to the second cell, to decide on to which cell handover of the mobile station should be carried out.

18. (Withdrawn) The cellular communication system of claim 14, wherein the system is further configured, when deciding on handover of the mobile station from the first cell to the second cell, to decide on when handover should be carried out.

19. (Original) The cellular communication system of claim 14, wherein the system is further configured to utilize information about traffic distribution in the system when deciding on handover of the mobile station.

20. (Original) The cellular communication system of claim 14, wherein the system is further configured to utilize information about capacity provided by the system in different parts of the system when deciding on handover of the mobile station.

21. (Original) The cellular communication system of claim 14, wherein the system is further configured to define sub-areas within the coverage area of the system and preferable bit rates for each sub-area, whereby the system is configured to use so defined sub-area information when deciding on handover of the mobile station.

22. (Previously Presented) The cellular communication system of claim 16, wherein the system comprises:

a handover profile comprising definitions of preferable cell(s) for each bit rate whereby the system is further configured to use the handover profile when deciding on handover of the mobile station.

23. (Withdrawn) The cellular communication system of claim 18, wherein, when the mobile station is moving from the first cell to a second cell the system, the system is further configured to:

measure the bit rate provided to the mobile station by the first cell and/or a bit rate provided to the mobile station by the second cell; and

perform handover of the mobile station from the first cell to the second cell when the bit rate provided by the first cell and/or the bit rate provided by the second cell fulfils a predetermined condition(s).

24. (Currently Amended) The cellular communication system of claim ~~23~~14, wherein the predetermined condition requires that the bit rate is lower than a predetermined limit value, higher than a predetermined limit value or between two predetermined limit values.

25. (Original) The cellular communication system of claim 24, wherein the limit value(s) is (are) based on the variation of the bit rate provided by the first cell and/or the bit rate provided by the second cell.

26. (Previously Presented) The cellular communication system of claim 14, wherein the first cell and the second cell belong to different radio access systems or to the same radio access system.

27. (Currently Amended) A system element for controlling handovers in a cellular communication system comprising cells and a mobile station having a connection to at least a first cell providing a certain ~~data transfer rate, comprising a bit rate,~~ to the mobile station, wherein the system element is configured to when the mobile station is moving from the first cell to a second cell:

collect bit rate information related to the mobile station by measuring the bit rate provided to the mobile station by the first cell and/or a bit rate provided to the mobile station by the second cell; and

use the bit rate information for deciding on when handover of the mobile station from the first cell to ~~a~~the second cell should be carried out by triggering the execution of handover of the mobile station from the first cell to the second cell when the bit rate provided by the first cell and/or the bit rate provided by the second cell fulfils a predetermined condition(s).

28. (Original) The system element of claim 27, wherein the bit rate information comprises at least one of the following: the bit rate provided to the mobile station by the first cell, a bit rate provided to the mobile station by at least one second cell, a bit rate requested by the mobile station.

29. (Original) The system element of claim 27, wherein the system element is further configured, when deciding on handover of the mobile station from the first cell to the second cell, to decide on whether handover should be carried out.

30. (Original) The system element of claim 27, wherein the system element is further configured, when deciding on handover of the mobile station from the first cell to the second cell, to decide on to which cell handover of the mobile station should be carried out.

31. (Withdrawn) The system element of claim 27, wherein the system element is further configured, when deciding on handover of the mobile station from the first cell to the second cell, to decide on when handover should be carried out.

32. (Original) The system element of claim 27, wherein the system element is further configured to utilize information about traffic distribution in the system when deciding on handover of the mobile station.

33. (Original) The system element of claim 27, wherein the system element is further configured to utilize information about capacity provided by the system in different parts of the system when deciding on handover of the mobile station.

34. (Original) The system element of claim 27, wherein the system element is further configured to define sub-areas within the coverage area of the system and preferable bit rates for each sub-area, whereby the system element is configured to use so defined sub-area information when deciding on handover of the mobile station.

35. (Previously Presented) The system element of claim 29, wherein the system comprises a handover profile comprising definitions of preferable cell(s) for each bit rate whereby the system element is further configured to use the handover profile when deciding on handover of the mobile station.

36. (Withdrawn) The system element of claim 31, wherein, when the mobile station is moving from the first cell to a second cell, the system element is further configured to:

measure the bit rate provided to the mobile station by the first cell and/or a bit rate provided to the mobile station by the second cell; and

perform handover of the mobile station from the first cell to the second cell when the bit rate provided by the first cell and/or the bit rate provided by the second cell fulfils a predetermined condition(s).

37. (Currently Amended) The system element of claim ~~36~~27, wherein the predetermined condition requires that the bit rate is lower than a predetermined limit

value, higher than a predetermined limit value or between two predetermined limit values.

38. (Original) The system element of claim 37, wherein the limit value(s) is (are) based on the variation of the bit rate provided by the first cell and/or the bit rate provided by the second cell.

39. (Previously Presented) The system element of claim 27, wherein the system element is a radio network controller.

40. (Previously Presented) The system element of claim 27, wherein the system element is the mobile station.

41. (Previously Presented) The system element of claim 27, wherein the first cell and the second cell belong to different radio access systems or to the same radio access system.

42. (Currently Amended) A mobile station for use in a cellular communication system comprising cells, the mobile station being configured to:

collect bit rate information related to the mobile station by measuring, when the mobile station has a connection to at least a first cell, a bit rate provided to the mobile

station by the first cell and/or a bit rate provided to the mobile station by a second cell;
and

use the bit rate information ~~for~~ to decide ~~ing~~ on when handover of the mobile station from a first cell to ~~a~~ the second cell should be carried out by triggering the execution of handover of the mobile station from the first cell to the second cell when the bit rate provided by the first cell and/or the bit rate provided by the second cell fulfils a predetermined condition(s).

43. (Currently Amended) A method for deciding on handover in a cellular communication system, comprising:

~~cells and a mobile station having a connection to at least a first cell providing a certain data transfer rate, comprising a bit rate, to the mobile station, the method comprising:~~

collecting bit rate information related to ~~the~~ a mobile station, the collecting comprising measuring ~~the~~ a bit rate provided to the mobile station by ~~the~~ a first cell and/or a bit rate provided to the mobile station by a second cell; and

using the bit rate information for deciding on handover of the mobile station from the first cell to the second cell, the deciding comprising deciding to perform the mobile station handover from the first cell to the second cell when the bit rate provided by the first cell and/or the bit rate provided by the second cell fulfils a predetermined

condition(s), wherein the mobile station initially has a connection to at least the first cell providing a certain data transfer rate and bit rate to the mobile station.

44. (Currently Amended) A cellular communication system comprising:

cells; and

~~a mobile station having a connection to at least a first cell providing a certain data transfer rate, comprising a bit rate, to the mobile station; wherein the system is configured to~~

collect bit rate information related to the mobile station by measuring ~~the~~ a bit rate provided to the mobile station by ~~the~~ a first cell and/or a bit rate provided to the mobile station by a second cell; and

use the bit rate information for deciding on mobile station handover from the first cell to the second cell such that the system is configured to decide to ~~perform~~ trigger the execution of handover of the mobile station from the first cell to the second cell when the bit rate provided by the first cell and/or the bit rate provided by the second cell fulfils a predetermined condition(s).

45. (Currently Amended) A system element for controlling handovers in a cellular communication system comprising cells and a mobile station ~~having a connection to at least a first cell providing a certain data transfer rate, comprising a bit rate, to the mobile station~~, wherein the system element is configured to

collect bit rate information related to the mobile station by measuring ~~the~~ a bit rate provided to the mobile station by ~~the~~ a first cell and/or a bit rate provided to the mobile station by a second cell; and

use the bit rate information for deciding on handover of the mobile station from the first cell to the second cell such that the system element is configured to decide to trigger the execution of ~~perform~~ handover of the mobile station from the first cell to the second cell when the bit rate provided by the first cell and/or the bit rate provided by the second cell fulfils a predetermined condition(s).

46. (Currently Amended) A mobile station for use in a cellular communication system comprising cells, the mobile station being configured to

collect bit rate information related to the mobile station by measuring, ~~when the mobile station has a connection to a first cell,~~ a bit rate provided to the mobile station by ~~the~~ a first cell and/or a bit rate provided to the mobile station by a second cell; and

use the bit rate information for deciding on handover of the mobile station from the first cell to the second cell such that the mobile station is con-figured to decide to trigger the execution of ~~perform~~ handover of the mobile station from the first cell to the second cell when the bit rate provided by the first cell and/or the bit rate provided by the second cell fulfils a predetermined condition(s).

47. (New) A system for deciding on handover in a cellular communication system, comprising:

collecting means for collecting bit rate information related to a mobile station by measuring a bit rate provided to the mobile station by a first cell and/or a bit rate provided to the mobile station by a second cell; and

deciding means for deciding on handover of the mobile station from the first cell to the second cell using the bit rate information by triggering the execution of handover of the mobile station from the first cell to the second cell when the bit rate provided by the first cell and/or the bit rate provided by the second cell fulfils a predetermined condition(s).